

**IN THE CLAIMS:**

Please cancel claims 2-25 and amend the remaining claim in the application as follows:

1. (Currently Amended) A method for automatically designing a catalog for a plurality of items using a computer system, the method comprising the steps of:

estimating a relationship between placement of an item in a catalog and corresponding user responses, the user responses being obtained from a transaction history;

determining an optimized position for each item using the estimated relationships; and

forming a catalog with the items being placed at determined optimized positions;

deploying a plurality of initial catalogs with different item placements; and

obtaining user responses for the initial catalogs, wherein the plurality of initial catalogs refer to any of different catalogs for different groups of users over a same period of time, different catalogs for a same group of users over different periods of time, and a combination of both.

wherein the step of estimating a relationship between placement of the items in a catalog and corresponding user responses comprises the steps of:

computing item differentials from the user responses; and

computing search costs from the user responses,

wherein the step of computing item differentials comprises the steps of:

computing an effect of the nature of an item on said user responses; and

computing an effect of the nature of an item on said user responses for other items

in the catalog.

wherein the step of computing search costs comprises the steps of:

computing an effect of placing an item at a particular position in the catalog on  
said user responses; and

computing an effect of relative positions of items on said user responses,

wherein the step of determining an optimized position comprises the steps of:

modeling a merchant specified objective as an optimization function in terms of  
item placement, item differentials, and search costs; and

evaluating the optimization function to identify an optimal placement of each item  
in the catalog.

2-25. (Cancelled).